

MN-3254/MN-3254T

Distributed Motionnet 16-ch Isolated DI
,16-ch Isolated DO Module

Features

- Maximum communication speed: 20 Mbps
- 16-ch isolated digital inputs, 16-ch isolated digital outputs
- Each Motionnet transfer line: connect modules up to 64
- Designing isolation protection: power, communication, I/O
- LED Diagnostics for communication and I/O status
- Each input port can be specified as NPN or PNP (12 ~ 24 V)
- The internal flywheel diode of each output ports can be connect to different sources of power individually
- High current sinking capability (200 mA)

Introduction

The **MN-3254(T)** is an I/O expansion device for Motionnet systems, and is equipped with 16 isolated digital input channels and 16 isolated digital output channels. Each Motionnet communication line can be connected to up to 64 modules, meaning that the I/O can be expanded to up to 1024 input channels and 1024 output channels. The communication time required by each MN-325x is 15.1 us.

If 64 modules have been connected, signals for 2048 points on 64 modules can be sent and received within 0.97 msec. The update of the I/O status is completed automatically through the Motionnet system at a constant interval, and setting interrupts for specific input points that the customer wants to monitor can help prevent CPU time from being wasted by repetitive polling when there is nothing else for the issuing process to do. Each input port can be specified as either NPN or PNP (12~24 V), and the internal flywheel diodes of each output port can be individually connected to different sources of power (each port is comprised of 8 I/O signals).

Specifications

Model	MN-3254	MN-3254T
Hardware		
Connector	13-Pin pluggable Terminal block x 4	
LED Indicators		
Status	Communication state (Link, Error), Internal 3.3 V Power, Termination Resistor Switch, Input/Output state	
Digital Input		
Channels	16	
Type	Wet Contact	
Sink/Source (NPN/PNP)	Sink/Source (NPN/PNP)	
ON Voltage Level	+10 ~ 30 VDC	
OFF Voltage Level	+3 VDC max.	
Isolation	3000 Vrms	
Input Impedance	4.7 KΩ	
Digital Output		
Channels	16	
Type	Open Collector, with internal flywheel diode	
Sink/Source (NPN/PNP)	Sink	

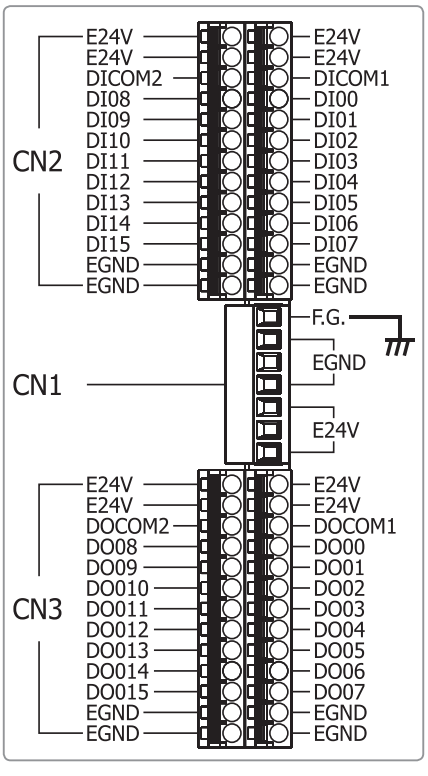
Model	MN-3254	MN-3254T
Load Voltage	+30 VDC max.	
Load Current	200 mA max. for each channel	
Isolation	3000 Vrms	
Motionnet		
Communication Connectors	RJ-45 x 2	5-pin terminal block
Transfer Speed	Selectable 2.5, 5, 10 or 20 Mbps by DIP Switch	
Cyclic Time	15.1 μs per device (20 Mbps)	
Power		
Input Range	24 VDC (1000 V isolated)	
Consumption	2 W max.	
Mechanical		
Casing	Plastic	
Dimensions (mm)	31 mm x 140 mm x 126.6 mm	
Installation	DIN-Rail mounting	
Environment		
Operating Temperature	0 ~ +60 °C	
Storage Temperature	-20 ~ +80 °C	
Humidity	10 ~ 90% RH, Non-condensing	

Ordering Information

MN-3254 CR	Distributed Motionnet 16-ch Isolated DI, 16-ch Isolated DO Module with RJ-45 Connector (RoHS)
MN-3254T CR	Distributed Motionnet 16-ch Isolated DI, 16-ch Isolated DO Module with Terminal Block (RoHS)

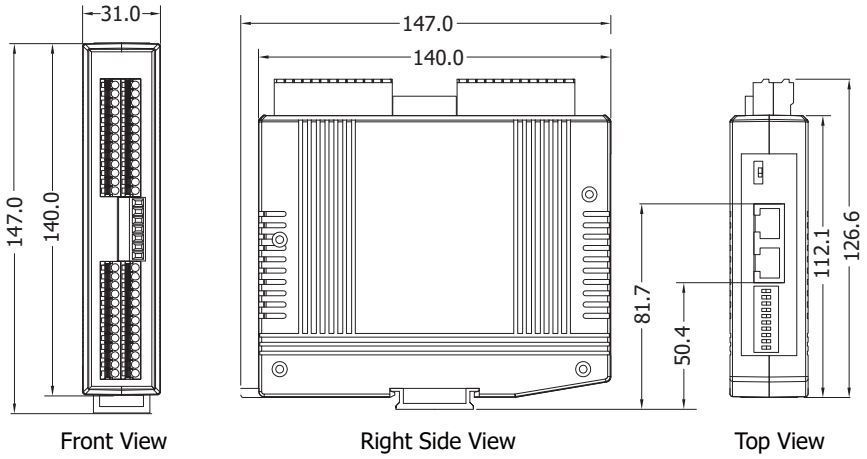
Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Pin Assignments



NO.	Pin Define.	Specifications	I/O Define.
CN1			
1	FG	Frame Ground	-
2 ~ 4	EGND	External Ground	Input
5 ~ 7	E24V	External 24V (+)	Input
CN2A (Right)			
1 ~ 2	E24V	External 24V (+)	Connect to CN1
3	DICOM1	Common terminal of DI00 ~ DI07	Input
4 ~ 11	DI00 ~ DI07	Digital input channels 00 ~ 07	Input
12 ~ 13	EGND	External Ground	Connect to CN1
CN2B (Left)			
1 ~ 2	E24V	External 24V (+)	Connect to CN1
3	DICOM2	Common terminal of DI08 ~ DI15	Input
4 ~ 11	DI08 ~ DI15	Digital input channels 08 ~ 15	Input
12 ~ 13	EGND	External Ground	Connect to CN1
CN3A (Right)			
1 ~ 2	E24V	External 24V (+)	Connect to CN1
3	DOCOM1	Common Anode for Flywheel Diodes of DO00 ~ DO07	Input
4 ~ 11	DO00 ~ DO07	Digital output channels 00 ~ 07	Output
12 ~ 13	EGND	External Ground	Connect to CN1
CN3B (Left)			
1 ~ 2	E24V	External 24V (+)	Connect to CN1
3	DOCOM2	Common Anode for Flywheel Diodes of DO08 ~ DO15	Input
4 ~ 11	DO08 ~ DO15	Digital output channels 08 ~ 15	Output
12 ~ 13	EGND	External Ground	Connect to CN1

Dimensions: (Units: mm)



Front View　　Right Side View　　Top View

Related Products

PISO-MN200(T/EC) CR	PCI Bus, Dual-line Motionnet Master Card (RoHS)
MN-SERVO-xxx(-EC) Series CR	Distributed Motionnet Single-axis Motion Control Modules (MJ3 / PA4 / YSV / DAA) (RoHS)
MN-2091U(-T) CR	Distributed Motionnet Single-axis Universal Motion Control Module (RoHS)
MN-MP4U-DIN CR	Distributed Motionnet Four-axis Universal Motion Control Module (RoHS)
MN-D622-DIN CR	Distributed Motionnet 16-ch Isolated DI 16-ch Isolated DO Module (RoHS)
MN-3253(T) CR / MN-D640-DIN CR	Distributed Motionnet 32-ch Isolated DI Module (RoHS)
MN-3257(T) CR / MN-D604-DIN CR	Distributed Motionnet 32-ch Isolated DO Module (RoHS)
MN-AD8-DIN CR	Distributed Motionnet 8-ch Analog Input Module (RoHS)
MN-DA2-DIN CR	Distributed Motionnet 2-ch Analog Output Module (RoHS)
MN-HUB4(EC) CR	Distributed Motionnet 4 Port Hub Module (RoHS)

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000